

## REMARKS

### To Claim Rejections 35 U.S.C. 102

Claim 1 is rejected as being anticipated by Reference Kągi (US 6,821,613)

New **claim 1** with the **features a – f** is amended by the underlined expressions:

- a A structural component made of long-fiber-reinforced thermoplastic material with integrated continuous fiber-reinforcements, the component comprising:
- b - at least three separate, single individually integrated, shaped continuous-fiber-profiles, which are separated from each other.
- c - the at least three single continuous-fiber-profiles extending into different directions and running together at a location,
- d - the at least three single continuous-fiber-profiles, at the location where they run together, defining a three-dimensionally developed intersection point,
- e - wherein at the intersection point at least a first continuous-fiber-profile lies in an upper plane of the intersection point, at least a second continuous-fiber-profile lies a lower plane of the intersection point, and wherein at least a third continuous-fiber-profile with a vertical orientation is located between the first and second continuous-fiber-profiles;
- f - wherein from the intersection point the first and the second continuous-fiber-profiles are extending into a first direction and the third continuous-fiber-profile is extending into a different second direction.
- g - wherein the continuous-fiber-profiles are joined together by the long-fiber-reinforced thermoplastic material at the intersection point.

These amendments are disclosed in the application as filed:

**as for feature b:** "...single... continuous-fiber-profiles which are separated from each other"

This is shown e.g. in Fig. 1a, 4, 5, 8a.

**as for feature e:** For clarification of the location of the third continuous-fiber-profile this has been defined by the expression "with a vertical orientation is located..." instead of "...with a vertical extension extends continuously ...".

The expression, that the single continuous-fiber-profiles are extending into different directions, means extensions along their length and therefore also extending away from the intersection point 50.

A new feature f has been added to clearly specify that the single continuous-fiber-profiles are extending into different directions: "- wherein from the intersection point the first and the second continuous-fiber-profiles are extending into a first direction and the third continuous-fiber-profile is extending into a different second direction". This is clearly shown e.g. in Fig. 1a, 1b, 1c, 2, 4, 5, 8a, 8b.

In the enclosed illustrating Fig. 1a (and also in Fig. 8a) the horizontal single continuous-fiber-profiles 10.1, 10.4 are extending into a first direction and the single profiles 10.2, 10.3 (with a vertical orientation) are extending into a different second direction

...and they are running together at the tree-dimensional intersection point 50.

#### **Reference Kāgi (US 6,821,613)**

The cited Reference Kāgi ('613) does not disclose nor indicate nor show in any Figure such a structure. The Reference Kāgi ('613) discloses an entirely different structural component where continuous-fiber strands are interconnected and have flat internal connecting areas (7) between two continuous-fiber strands (3.1, 3.2). All these connecting areas (7) are flat.

Nowhere in Kāgi is disclosed:

- at least three separate, single continuous-fiber-profiles, which are separated from each other,
- extending into different directions and running together at a location, and here are
- defining a three-dimensionally developed intersection point, where
- a first continuous-fiber-profile lies in an upper plane, a second continuous-fiber-profile lies a lower

plane and at least a third continuous-fiber-profile with a vertical orientation is located between the first and second continuous-fiber-profiles;

- wherein from the intersection point the first and the second continuous-fiber-profiles are extending into a first direction and the third continuous-fiber-profile is extending into a different second direction.

Specifically the cited Fig. 8 and Fig. 24c of the Reference Kāgi each only show one single combined profile structure extending into only one direction and without such a three-dimensionally developed intersection point (50).

Fig. 8 shows one profile structure 26 which consists of three continuous-fiber strands 3.1, 3.2, 3.3 which are entirely fused together along their length and which form one single U-shaped profile, extending into one (first) direction. As is illustrated in this enclosed Fig. 8 there are no three single continuous-fiber-profiles separated from each other and extending into a first and a second direction. The ribs 28 of this profile 26 consist of long-fiber-reinforced thermoplastic material.

Fig. 24c shows a cross-section of an U-shaped combined profile 25, very similar to the profile 26 of Fig. 8, but consisting of only two continuous-fiber strands 3.1, 3.2 which are entirely fused together over their length and with ribs of long-fiber-reinforced thermoplastic material 2. This combined profile 25 with the two fused together continuous-fiber strands 3.1, 3.2 only extends into one (first) direction along the length of the profile 25 as is illustrated in the enclosed Fig. 24c.

Here also there are no at least three single continuous-fiber-profiles, separated from each other, extending into different directions and forming a three-dimensionally developed intersection point according to features b – f of new claim 1.

Also in all further Figs. of Kāgi ('613) there is no indication to the structural component according to the invention with all features b, c, d, e, f, g.

Since the new amended independent claim 1 should be allowable also the depending claims 2 – 3 and 5

- 19 should be allowable. (Therefore we would not discuss the further rejections regarding these depending claims.)

It is noted that the corresponding European Patent EP 1 581 380 B1 has been granted in view of the same prior art references as in USA. See front page, attached.

Respectfully submitted,

/s/

Carl Oppedahl  
PTO Reg. No. 32746  
telephone 970 468 8600